

Attorney Docket No. 040894-5574

Application No. 09/659,566

Page 2

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend claims 1 and 10 as follows:

Listing of Claims:

Claim 1 (Currently Amended): An image processing system for processing an input image containing an object image [[of]] with a predetermined pattern which may have been magnified,

said image processing system comprising:

one or more characteristic quantity computing means for computing one or more characteristic quantities of said object image, wherein said one or more characteristic quantities include pixel information representing the predetermined pattern of said object image;

a plurality of magnification estimating means for estimating a plurality of magnification levels on the basis of said one or more characteristic quantities computed by and output from said one or more characteristic quantity computing means; and

judging means for judging whether or not said object image is present in said input image, on the basis of whether or not the plurality of magnification levels estimated by said plurality of magnification estimating means are coincident with one another.

Attorney Docket No. 040894-5574
Application No. 09/659,566
Page 3

Claim 2 (Previously Presented): The image processing system according to claim 1,
wherein

said plurality of magnification estimating means estimate said plurality of magnification levels in consideration of an error or errors of said one or more characteristic quantities computed by said one or more characteristic quantity computing means.

Claim 3 (Cancelled)

Claim 4 (Previously Presented): The image processing system according to claim 1,
wherein

said judging means synthetically judges whether or not said object image is present in said input image in consideration with an error or errors of said plurality of magnification levels estimated by said plurality of magnification estimating means.

Claim 5 (Previously Presented): The image processing system according to claim 1,
wherein

said judging means judges whether or not said object image is present in said input image, from said one or more characteristic quantities computed by said one or more characteristic quantity computing means and said plurality of magnification levels estimated by said plurality of magnification estimating means.

Attorney Docket No. 040894-5574
Application No. 09/659,566
Page 4

Claim 6 (Previously Presented): The image processing system according to claim 1,
wherein
said judging means judges whether or not said object image is present in said input
image, from said one or more characteristic quantities computed by said one or more
characteristic quantity computing means and an error or errors of said plurality of magnification
levels estimated by said plurality of magnification estimating means.

Claim 7 (Previously Presented): The image processing system according to claim 1,
further comprising:
specific color extracting means for extracting a specific color from said input image, said
specific color extracting means being located at a pre-stage of said characteristic quantity
computing means.

Claim 8 (Previously Presented): The image processing system according to claim 1,
further comprising:
resolution converting means for converting a resolution of said input image into another
resolution, said resolution converting means being located at a pre-stage of said characteristic
quantity computing means.

Attorney Docket No. 040894-5574

Application No. 09/659,566

Page 5

Claim 9 (Previously Presented): The image processing system according to claim 1, further comprising:

window processing means for sequentially cutting predetermined image areas out of said input image, said window processing means being located at a pre-stage of said characteristic quantity computing means.

Claim 10 (Currently Amended): A method of processing an input image containing an object image ~~[[of]]~~ with a predetermined pattern which may have been magnified,

said image processing method comprising the steps of:

~~computing means for~~ computing one or more characteristic quantities of said object image, wherein said one or more characteristic quantities include pixel information representing the predetermined pattern of said object image;

estimating a plurality of magnification levels on the basis of said one or more characteristic quantities computed by said characteristic quantity computing step; and

judging whether or not said object image is presented in said input image, on the basis of whether or not the plurality of magnification levels estimated by said ~~plurality of magnification~~ estimating means step are coincident with one another.

Attorney Docket No. 040894-5574
Application No. 09/659,566
Page 6

Claim 11 (Previously Presented): The image processing method according to claim 10,
wherein,

said magnification estimating step estimating said plurality of magnification levels in
consideration of an error or errors of said one or more characteristic quantities computed by said
characteristic quantity computing step.

Claim 12 (Cancelled)

Claim 13 (Previously Presented): The image processing method according to claim 10,
wherein

said judging step synthetically judges whether or not said object image is present in said
input image, in consideration of an error or errors of said plurality of magnification levels
estimated by said magnification estimating step.

Claim 14 (Previously Presented): The image processing method according to claim 10,
wherein

said judging step judges whether or not said object image is present in said input image,
from said one or more characteristic quantities computed by said characteristic quantity
computing step and said plurality of magnification levels estimated by said magnification
estimating step.

Attorney Docket No. 040894-5574
Application No. 09/659,566
Page 7

Claim 15 (Previously Presented): The image processing method according to claim 10,
wherein

said judging step synthetically judges whether or not said object image is present in said
input image, in consideration of said one or more characteristic quantities computed by said
characteristic quantity computing step and said plurality of magnification levels estimated by
said magnification estimating step.

Claim 16 (Original): The image processing method according to claim 10, further
comprising:

a step for extracting a specific color from said input image, said specific color extracting
step being performed before said characteristic quantity computing step is performed.

Claim 17 (Previously Presented): The image processing method according to any of
claims 10, 11, 13, 14 and 15, further comprising:

a resolution converting step for converting a resolution of said input image into another
resolution, said resolution converting step being performed before said characteristic quantity
computing step is performed.

Attorney Docket No. 040894-5574
Application No. 09/659,566
Page 8

Claim 18 (Original): The image processing method according to claim 10, further comprising:

a window processing step for sequentially cutting predetermined image areas out of said input image, said window processing step being performed before said characteristic quantity computing is performed.

Claim 19 (Previously Presented): An image forming apparatus comprising:

interface means for receiving an image which may have been magnified, from an external device;

image forming means for forming an image on the basis of the image data received by said interface means,

recognizing means for judging whether or not an object image is present in said input image; and

control means for controlling an overall of said image forming apparatus, when said recognizing means judges that said object image is contained in said image data received by said interface means, said control means making image data invalid; wherein

said recognizing means includes said image processing system defined in claim 1.

Attorney Docket No. 040894-5574
Application No. 09/659,566
Page 9

Claim 20 (Original): The image forming apparatus according to claim 19, wherein
said control means performs said image invalidating process such that said control means
causes said image forming means to form an image on the bases of predetermined image data
and the image data received by said interface means.

Claim 21 (Original): The image forming apparatus according to claim 19, wherein
said control means performs said image invalidating process such that said control means
inhibits the formation of said received image data.

Claim 22 (New): The image processing system according to claim 1, wherein said pixel
information includes ON pixel information and ON/OFF inverse information.

Claim 23 (New): The image processing system according to claim 22, wherein said ON
pixel information includes the number of ON pixels, and said ON/OFF inverse information
includes ON and OFF inverse pixels.